



AT A GLANCE

Health Risks in the United States

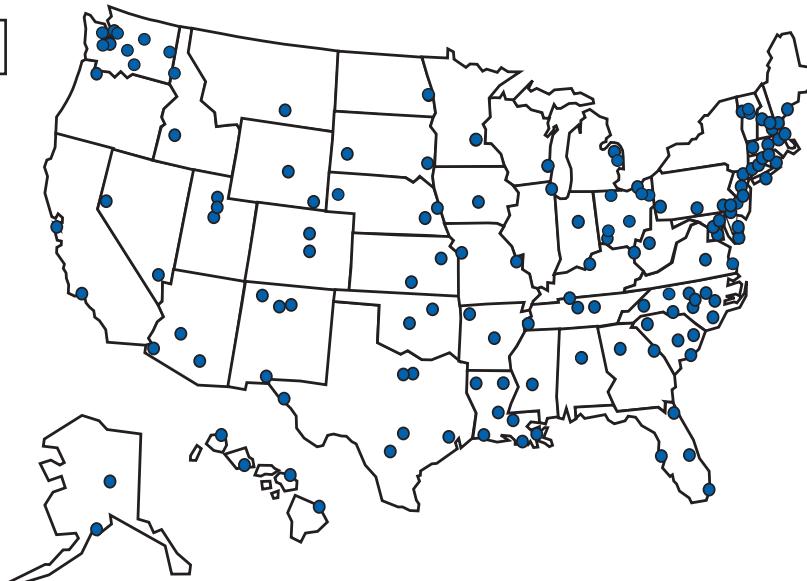
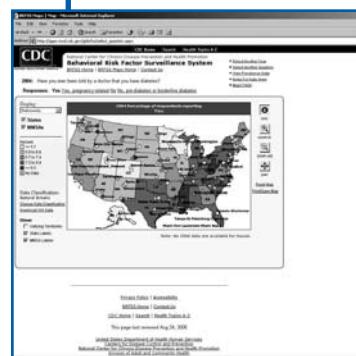
Behavioral Risk Factor Surveillance System

2006

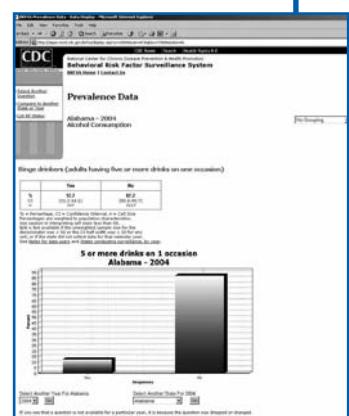
New Tools for the Nation

SMART* BRFSS Local Health Information

Interactive Maps



State Health Information



* Selected Metropolitan/Micropolitan Area Risk Trends.

"One of the most important innovations during the 2004-2005 flu season was to take advantage of the Behavioral Risk Factor Surveillance System to get information about vaccine coverage among various target populations."

*Julie Louise Gerberding, MD, MPH
Director, Centers for Disease Control and Prevention*

Measuring Health Risks Among Adults

For more than 20 years, CDC's Behavioral Risk Factor Surveillance System (BRFSS) has helped states survey U.S. adults to gather information about a wide range of behaviors that affect their health. The primary focus of these surveys has been on behaviors and conditions that are linked with the leading causes of death—heart disease, cancer, stroke, diabetes, and injury—and other important health issues.

These behaviors and conditions include

- Not getting enough physical activity.
- Being overweight.
- Not using seatbelts.
- Using tobacco and alcohol.
- Not getting preventive medical care, such as flu shots, mammograms, Pap smears, and colorectal cancer screening tests, that can save lives.

"The BRFSS provides states with behavioral data to make critical decisions for public health programs."

*Donna Nichols, MSEd, CHES
Senior Prevention Policy Analyst, Texas Department of Health*

Through the BRFSS surveys, CDC and the states have learned much about these and other harmful behaviors and conditions. This information is essential for planning, conducting, and evaluating public health programs at the national, state, and local levels. Private organizations also rely on the survey data to develop health promotion programs to reduce the prevalence of unhealthy behaviors and to document the effectiveness of these programs.

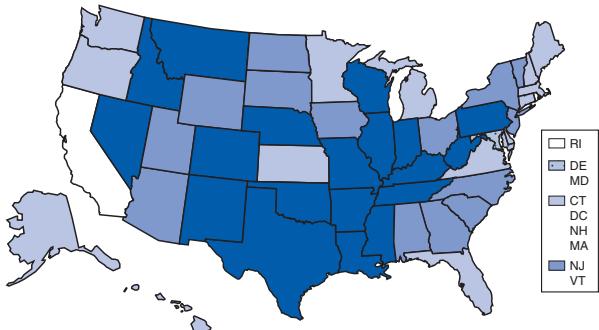
CDC's Unique State-Based Surveillance System

The BRFSS gathers information through telephone surveys conducted by the health departments of all 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam with assistance from CDC. The BRFSS is the world's largest continuously conducted telephone health surveillance system. States use BRFSS data to identify emerging health problems, to establish health objectives and track their progress toward meeting them, and to develop and evaluate

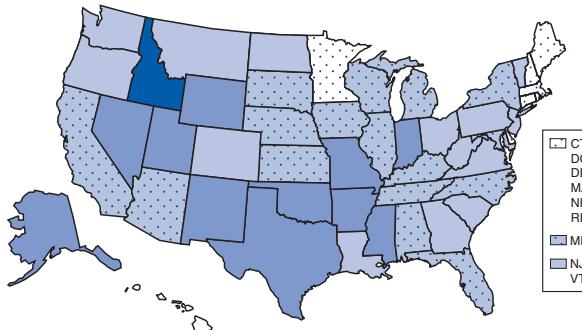
public health policies and programs to address identified problems. The BRFSS is the primary source of data for states and the nation on the health-related behaviors of adults. States collect data through monthly telephone interviews with adults aged 18 or older. BRFSS interviewers ask questions related to behaviors that are associated with preventable chronic diseases, injuries, and infectious diseases. Congress appropriated \$7.5 million for this system in fiscal year 2006.

Women Aged 40 Years or Older Who Had Not Had a Mammogram Within the Past 2 Years

1994



2004



□ No Data □ <20% □ 20%-24.9% □ 25%-29.9% □ 30%-34.9% □ ≥35%

Source: CDC, Behavioral Risk Factor Surveillance System.

CDC works with states to ensure the success of the BRFSS. For example, CDC public health advisors provide technical assistance, and CDC epidemiologists help with survey methodology and data analysis. To ensure that the BRFSS data are of high quality, CDC generates a household calling list for each state, processes survey data, produces monthly and annual quality assurance reports, and provides online training for state-based BRFSS coordinators and interviewers. CDC also helps states develop resources to analyze, interpret, and use their survey data. State and local health departments rely on data from the BRFSS to

- Determine high-priority health issues and identify populations at highest risk for illness, disability, and death by analyzing data according to respondents' age, sex, education, income, and race/ethnicity.
- Develop strategic plans and targeted prevention activities and programs.

- Examine trends in behaviors over time to monitor the effectiveness of public health programs and progress in meeting prevention goals.
- Support community policies and programs that promote health and prevent disease—for example, by educating the public, the health community, and policy makers about disease prevention.

Researchers, professional groups, managed care organizations, and community-based groups use BRFSS data to develop targeted prevention activities and programs. Public health professionals use the data to monitor the progress of the nation, states, and local areas toward meeting the health objectives in *Healthy People 2010*. In addition, Canada, Australia, Russia, and several other countries recognize the value of the BRFSS and have asked CDC to help them establish similar surveillance systems.

Versatility of the BRFSS

The BRFSS allows states the flexibility to add questions specific to their needs. At the same time, standard core questions on the survey enable health professionals to make comparisons among states and local areas and also to reach national conclusions. BRFSS data have highlighted state-to-state differences in key health issues. In 2004, for example, the percentage of adults who were current smokers ranged from 10.4% in Utah to 27.5% in Kentucky.

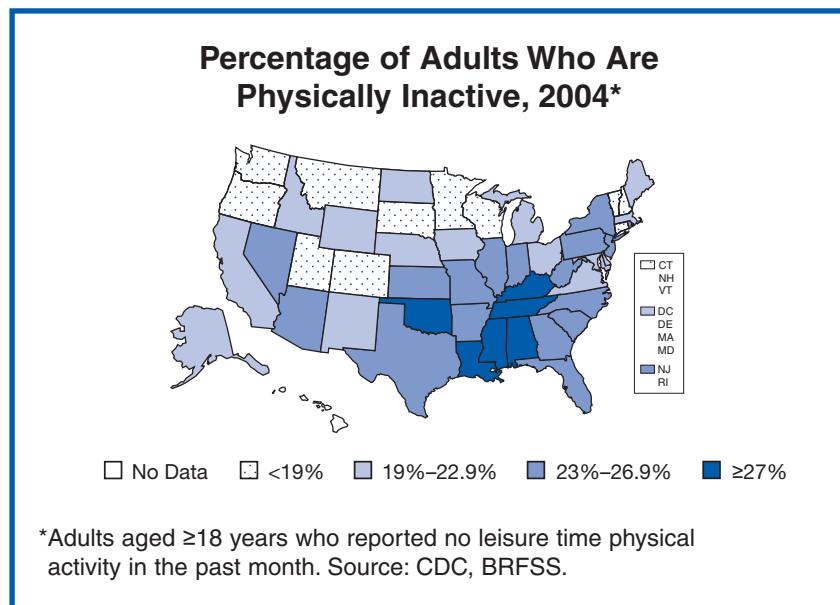
BRFSS data also can be used to examine smaller geographic areas within states. For example, CDC has analyzed BRFSS data for more than 140 metropolitan and micropolitan statistical areas (MMSAs). The results of this analysis, which are available on a searchable Web site called Selected Metropolitan/Micropolitan Area Risk Trends (SMART) BRFSS, show that the prevalence of high-risk health behaviors varies substantially among MMSAs.

In areas analyzed for 2004,

- The prevalence of no leisure time physical activity ranged from 14.2% in the Provo-Orem, UT, MMSA to 29% in the Alexandria, LA, and New York-Wayne-White Plains, NY-NJ, MMSAs.
- The prevalence of no health insurance ranged from 7% in the Bethesda-Frederick-Gaithersburg, MD, and Cambridge-Newton-Framingham, MA, MMSAs to 36.5% in the El Paso, TX, MMSA.
- The prevalence of adults aged 65 years or older

who had not had a flu shot in the past year ranged from 18.3% in the Cheyenne, WY, MMSA to 45% in the Las Vegas-Paradise, NV, MMSA.

The BRFSS also can be used to address urgent and emerging health issues in a particular area. States can add questions on a wide range of important health issues, such as diabetes, arthritis, tobacco use, folic acid consumption, health care coverage, and even terrorism. For example, following the September 11, 2001, terrorist attack on the World Trade Center, New York, New Jersey, and Connecticut added questions to their BRFSS surveys to measure the psychological and emotional effects of this traumatic event.



BRFSS In Action

The BRFSS is addressing the challenges presented by a growing demand for survey data. One such challenge is to keep phone interviews to a reasonable length while meeting these demands for additional data. To meet the many challenges, the BRFSS has increased the number of adults interviewed in each state. In 2004, the average number of participants was 5,842 (range: 2,656 to 18,587). This increase allows states to provide local-level data and to use split sampling, in which different portions of the sample population answer different sets of BRFSS questions. As a result, states can collect BRFSS data on a wider range of topics each year.

With the addition of the SMART BRFSS, CDC is also able to provide data on health-specific risks for some communities. Another new resource is the BRFSS Maps interactive Web site, which graphically displays the prevalence of behavioral risk factors at state and MMSA levels. This tool is revolutionizing the way people at local, state, and federal levels use BRFSS data by providing easy access to specific examples important to local communities.

How Data Are Being Used

Monitoring the Flu Vaccine Shortage

When CDC learned that flu vaccine would be in short supply in 2004, public health officials needed to rapidly assess current vaccination rates among groups at highest risk for the flu. Within 1 month, new questions were temporarily added to BRFSS surveys in all states to collect information on vaccine use by all residents aged 6 months or older. The resulting data helped to shape national and state public awareness messages about the vaccine shortage and to guide how limited supplies would be distributed.

Reducing Binge Drinking in North Dakota

In 2003, SMART BRFSS data indicated that Fargo, North Dakota, had one of the highest rates of binge drinking in the country: 24.9% compared with a national median of 16.4%. A community coalition was created to address the problem. This coalition developed an educational campaign and helped implement penalties against businesses that served too much alcohol to customers. It also created an interven-

tion that emergency department doctors could use with patients who exhibited high-risk drinking behavior.

Assessing Disaster Needs in Florida

Florida public health officials used the BRFSS survey to collect data immediately after a series of devastating hurricanes in August and September 2004. They learned that 48.7% of residents did not have an emergency evacuation plan in the event of a hurricane. The Florida Department of Health is now using the BRFSS data to help residents prepare better for future hurricanes. The BRFSS is an effective tool for rapidly assessing the effects of natural disasters on people's lives and on public health.

Promoting Physical Activity in Montana

Montana used the BRFSS survey to determine what types of outdoor recreational facilities its residents wanted and needed. The resulting data indicated a need for walking trails, fishing access sites, and boat ramps. State officials used this information to plan new programs, guide how money was spent, and promote physical activity throughout the state.

Future Directions

States and urban areas will continue to rely on the BRFSS to gather the high-quality data they need to plan and evaluate public health programs and to allocate scarce resources. CDC will work closely with state and federal partners to ensure that the BRFSS continues to provide data that are useful for public health research and practice and for state and local health policy decisions.

As telecommunication technology evolves, CDC is exploring the use of multiple methods to collect BRFSS data. These include sending a letter of notification before the phone interview and conducting surveys by mail or on the Internet. CDC is working to make the BRFSS more representative by exploring new ways to reach hard-to-find populations. CDC also is developing new ways of using BRFSS data. For example, CDC is experimenting with follow-up studies of particular subpopulations identified by the BRFSS, such as people with asthma.

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